

A NEW SPECIES OF GENUS *DACUS* FABRICIUS (TEPHRITIDAE: DIPTERA) FROM INDIA¹PREMLATA AND AWTAR SINGH²*(With six text-figures)*

INTRODUCTION

The genus *Dacus* was first erected by Fabricius in 1805 for the type species *Dacus armatus*. Since then many subgenera have been described under genus *Dacus*, the subgenus *Bactrocera* (= *Strumeta* Walker 1856) being the largest group among them. It is differentiated from the rest of the subgenera by the presence of a row of cilia on each side of 3rd tergum; a single pair of Scutellar bristles; and by the 5th sternum of male with a deep V-shaped concavity on the hind margin. This note describes a new species, *Dacus (Bactrocera) cocciniae* sp. nov.

***Dacus (Bactrocera) cocciniae* sp. nov.**

MALE:

Head: yellow except brown eyes; frons yellow, slightly fulvous towards ocellar triangle, 2 pairs of inferior orbitals; ocellar triangle brown, ocelli pale; antennae as long as the face, 3rd antennal segment 3 to 4 x longer than wide, arista bare; face yellow with 2 sublateral small black spots, proboscis long, geniculate and hairy, palpi short and rufous.

Thorax: rufous with humeral calli, notopleural calli, mesopleuron and scutellum yellow, no post sutural yellow vittae, thoracic chaetotaxy much reduced with 4 scapulars, 2 notopleurals, 1 mesopleurals, 2 posterior supra

alars and 2 scutellars; anterior supra alar and prescutellar bristles absent.

Legs yellow with brown tarsi.

Wings: hyaline with light fuscations along costa and anal spine, vein R_{4+5} spinose till the level with 'm' cross-vein; supernumerary lobe distinct.

Abdomen: rufous yellow with 2 sublateral black spots on 3rd tergite which also possess a row of cilia on postero lateral border, 5th sternum with a deep V-shaped concavity.

Male terminlia

Periphallic organs: ninth tergite fulvous almost rectangular above tapering below to surstyli, covered with dense pale bristles; surstyli broad at base ending in a small anterior lobe and a slightly longer posterior lobe, outer clasper well developed bearing 2 equal prenisetae. 3 marginal and 5 submarginal bristles; decasternum yellow, bristly and quadrangular in shape.

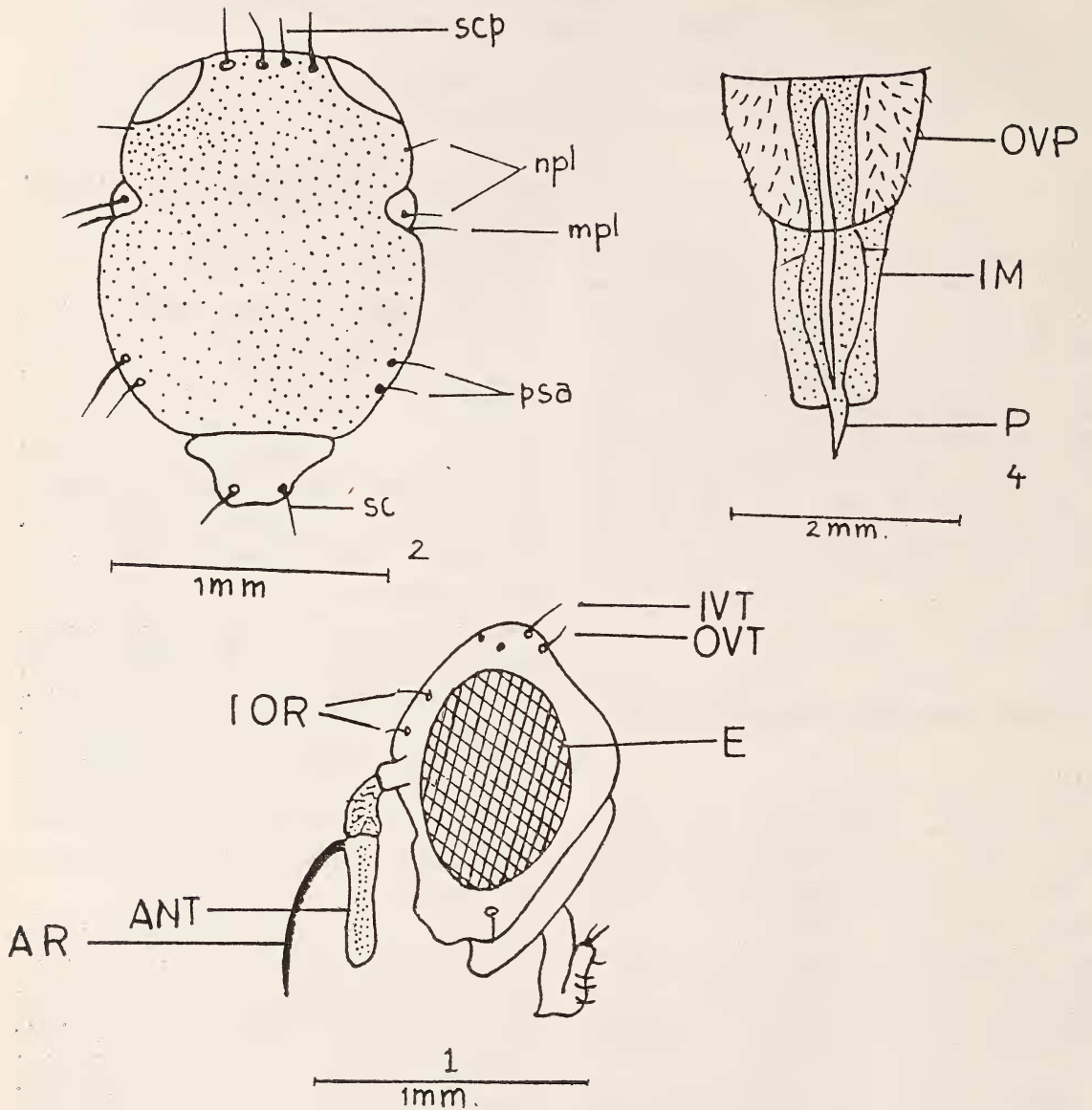
Phallic organs: genital ring simple, fultella andiron type, median rod bifid posteriorly, vanes elongate, phallic apodeme short and slender, phallobase ring like; aedeagus highly sclerotized leaving the base, vesica and apical tube non-sclerotized, phalotheca long and looped, ejaculatory apodeme large, fan broad with narrow base and long stem.

FEMALE:

Resembles the male but has the following differences; supernumerary less developed; pecten absent; abdomen longer and slender than the male.

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² Dept. of Zoology, Punjab University, Chandigarh (India).

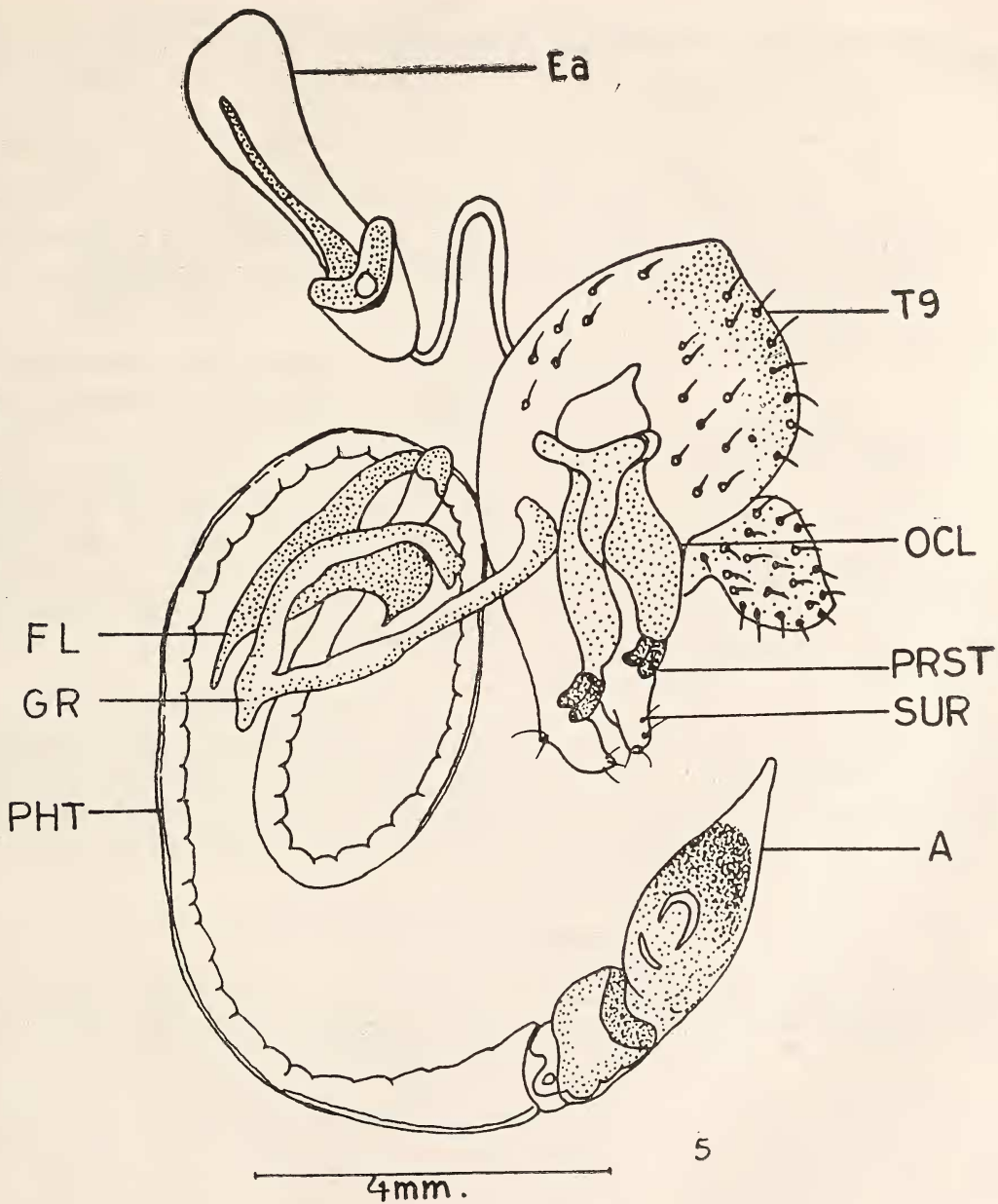


Dacus (Bactrocera) cocciniae sp. nov.
 1. Head; 2. Thorax; 4. Ovipositor.

Abbreviations:

ANT, Antennae; AR, Arista; E, Eye; IM, Inversion membrane; IVT, Inner verticals; IOR, Inferior orbitals; mpl, mesopleurals; npl, Notopleurals; OVP, Oviscape; OVT, Outer vertical; P, Piercer; psa, Posterior supra alar; sc, Scutellar; scp, Scapular.

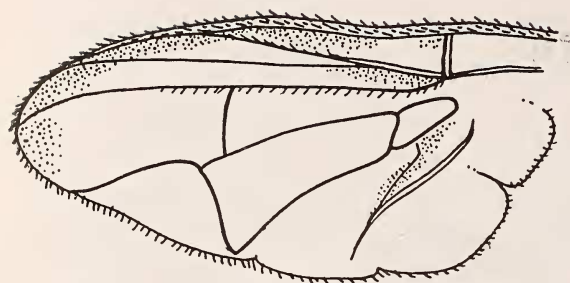
NEW DESCRIPTIONS



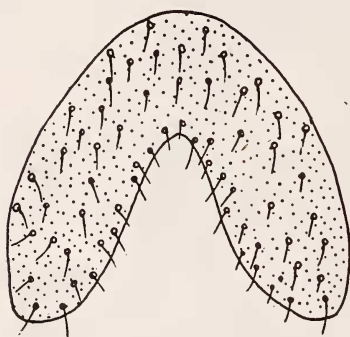
Dacus (Bactrocera) coccinae sp. nov.
5. Male Terminalia.

Abbreviations:

A, Aedeagus; Ea, Ejaculatory epodema; FL, Fultella; GR, Genital ring; OCL, Outer clasper; PHT, Phallotheca; PRST, Prensisetae; SUR, Surstylus; T9, Ninth tergite



1mm. 3



4mm. 6

Dacus (Bactrocera) cocciniae sp. nov.
3. Wing; 6. Fifth sternum of male.

Ovipositor: long measuring 0.7 mm, oviscapc pubescent, inversion membrane as long as oviscapc, piercer long and pointed.

Material Examined: Holotype ♂ Chandigarh, 21.xi.1985, *Coccinia indica*, coll. Premlata; Allotype ♀ same data, 6 Paratype, 2 ♂♂, 4 ♀♀ same data as holotype. Types in Entomology Section, Department of Zoology, Panjab University, Chandigarh.

Length of male 5.6 mm; Wing 4.3 mm.
Length of Female 5.2 mm; Wing 4.1 mm.
(excluding the ovipositor).

Remarks: The species is near to *Dacus (Bactrocera) tillyardi* Perkins in the absence of yellow post-sutural vittae but can be differentiated from it by the lack of anterior supra alar bristles and prescutellar bristles and rufous yellow body colour.

ACKNOWLEDGEMENTS

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REFERENCES

- FABRICIUS, J. C. (1805): *System. Antliatorum Secundum ordines, genera species.* 373 pp. Brunsvigae.
WALKER, F. (1856): *Proc. Linn. Soc. Lond. J.*: 33.
PERKINS, F. A. (1938): *Studies in Oriental and Australian Trypetidae. Part 2. Proc. Roy. Soc. Qld.* 49 (11): 120-144.